MEMORANDUM

To: RRC Members

D. John Blacker, Administrator/Maintenance Division Monte N. Brown, Administrator/Administration Division Jim Currie, Deputy Director/Department of Transportation

Dave Galt, Director/ Department of Transportation

Joel M. Marshik, P.E., Administrator/Highway and Engineering Division

Drew F. Livesay, Administrator/Motor Carrier Services Division Patricia Saindon, Administrator/Transportation Planning Division

Robert Burkhardt/Federal Highway Administration

From: Susan C. Sillick

Chief, Research Bureau

Date: July 30, 2002

SUMMARY OF MINUTES FROM THE JULY RRC MEETING HELD 7/29/02

1. **Budget Report:** Attached

Sue noted that another budget sheet has been added to the packet. This sheet contains state fiscal year projected expenditures through 2007 (Research has contracts through this SFY)

2. **Research Project – current listing:** Attached

2a. Cut Slope Stabilization Through Organic Matter Addition (98.019) - Approval-in-concept

Stan Sternberg, Environmental Services and Technical Panel Chairman, Phil Johnson attended the meeting to support this project and request an approval-in-concept. Phil showed the RRC several photos, gave a brief synopsis of the project, and answered questions.

The objective of this project is to develop a protocol for establishing optimum compost application methods and rates on selected soil types. The study will be conducted over two growing seasons. The research from this proposal will be implemented into highway projects.

Pat Saindon made a motion to proceed with this project. Joel Marshik seconded the motion. All present voted in favor of the motion.

- 3. **Reports:** Available Upon Request
 - 3a. *LTAP* Quarterly Progress Report 1/1/02-3/31/02
 - 3b. *High Performance Concrete Phase II –* Quarterly Progress Report 1/1/02-3/31/02
 - 3c. Highways as Potential Barriers to Movement and Genetic Exchange in Small Mammals Quarterly Progress Report 1/1/02-3/31/02
 - 3d. Pavement Performance Prediction Models March/April 2002
 - 3e. Erosion and Sediment Control Best Management Practices March/April 2002
 - 3f. Methods for Determining Bankfull Discharge and Other Flood Discharges in Ungaged Sites in Western Montana Based on Channel Morphology 7/1/01-12/31/01
 - 3g. Hydraulic and Sediment Transport Characteristics at Bridge Crossings on the Upper Yellowstone River 7/1/01-12/31/01
 - 3h. Evaluation of Methods for Estimation of Bridge-Pier Scour for Streams with Coarse Bed Materials Based on Observed Pier Scour in Montana 7/1/01-12/31/01
 - 3i. *Use of Dynamic Modulus (E*) in Hot-Mix Asphalt Designs* (Pooled Fund Study) Quarterly Progress Report 4/1/02-6/30/02
 - 3j. Investigation of Aggregate Shape Effects on Hot Mix Performance Using an Image Analysis Approach (Pooled Fund Study) June 2002
- 4. Contract Extension: None

5. **Proposals:**

5a. *Geosynthetic Reinforced Pile Supported (GRPS) Embankment* – Pooled Fund Study – Attached

John Moran met with the RRC to discuss and support this proposal.

The purpose of this study is to develop a set of comprehensive design guidelines for Geosynthetic Reinforced Pile Supported (GRPS) Embankment. Field data will be collected, using full-scale observations to verify design guides.

Following a discussion, Joel Marshik made a motion that the RRC fund this proposal with Sue having the flexibility to determine the monetary amount, depending upon amounts contributed from other sources, up to \$20,000.00 per year for 3 years. Monte Brown seconded the motion. All present voted in favor of the motion.

5b. A Guide on Crashworthy Bridge Railing and Approach Guardrail Transition Systems – Pooled Fund Study – Attached

Joe Kolman met with the RRC to discuss this proposal.

The objective of this proposal is to work toward the completion of a nationwide publication or guide on bridge railing and approach guardrail systems. The successful completion of these guides would result in clear and concise compilation of crash-tested bridge railing and transition hardware for use by researchers, bridge, and roadway engineers.

John Blacker made a motion that the RRC fund this proposal with Sue having the flexibility to determine the monetary amount up to \$15,000.00. Monte Brown seconded the motion. All present voted in favor of the motion.

5c. Falling Weight Deflectometer Calibration Centers and Operational Improvements – Pooled Fund Study – Attached

Jon Watson and John Amestoy met with the RRC to discuss and support this proposal.

Currently, there are four FWD Calibration Centers in the USA; these are operated by states, in which they are located. Under the present conditions, these states can no longer financially keep these centers open. The purpose of this study is to develop and implement long-term plans for FWD Calibration and to minimize the variability in pavement deflection data obtained with falling weight deflectometer. Pavement Management is asking for \$20,000.00 a year for two years for Phase I. At the completion of the phase, Pavement Management will revisit this study to determine if MDT should continue its participation in Phase II.

Following a discussion, the RRC decided they needed detailed information documenting the research aspect of the study and alternatives to MDT's participation in this study prior to making a decision. Jon and Sue will obtain additional information for the committee and this issue will be addressed at the next RRC meeting.

5d. Bozeman Pass Wildlife Linkage and Highway Safety Pilot Study - Attached

Amanda Hardy, WTI and Gordon Stockstad, Environmental Services, met with the RRC to discuss and support this proposal.

This proposal from the Western Transportation Institute (WTI) and Craighead Environmental Research Institute (CERI), involves the design and implementation of a pilot study to assess the effectiveness of incorporating highway fences, cattle guards, and landscaping to funnel animals under the road through an existing overpass structure, with the goals of improving human safety and wildlife connectivity across I-90 on Bozeman Pass.

Dave Galt moved to fund this proposal for \$53,000.00 as it ties in with a current MDT project. Joel Marshik seconded this motion. All present voted in favor of this motion.

Following the vote, a discussion ensued. The RRC would like Sue to develop together a list of all MDT Wildlife projects and the dollars amounts of each project to enable the committee to look at the overall picture of MDT's involvement.

6. **Implementation:** None

7. **Fuel Tax Research:** Attached (Drew)

Drew Livesay, Motor Carriers Service met with the RRC to start a dialog on a topic of interest to Monte Brown and himself.

Drew presented the idea of "Discussion of Fuel Tax Research Opportunities" for the RRC to consider, stating that this was not a proposal, nor request for funding at this time. The topic came out of a discussion following a Fuel Tax Advisory Council meeting. It was suggested MDT might want to consider hiring a consultant to research the "point of taxation" issue in neighboring and western states. It was also suggested that we might want to investigate extent of fuel tax evasion.

During the RRC discussion, they decided that other funding avenues should be investigated first. Bob Burkhardt will determine FHWA's position on these issues. Pat Saindon will investigate this issue with the AASHTO Board of Directors. Drew and Monte will work toward submitting both an NCHRP Project and Synthesis topic.

8. **FHWA Technology Transfer Funds** – Update

Sue reminded the RRC that proposals for the ensuing year are due Thursday, August 1, 2002.

9. LTAP Work Plan: Update

Sue informed the committee that the LTAP budget for the coming year was approved via e-mail ballot, the contract is in place, and the funding is set.

10. **TRB Staff Visit** – May 2002 – Update

Sue said the visit from TRB Staff member Stephen Maher went well, with lots of items being discussed. She has just received a packet of information from Stephen that will be distributed based upon discussions during this visit.

11. **AASHTO RAC Meeting** – July 13-17, 2002 – Update

This meeting was held in Kalispell, July 15th thru 17th. It went well; there were many positive comments.

12. FY 2004 NCHRP Problem Statement Solicitation

Sue reminded the committee that the submission statement deadline is September 15, 2002 for new NCHRP Projects.

She also brought up for discussion the fact that while recently reviewing the final ruling SPR, it came to mind that Bob Burkhardt, the RRC Federal Highway representative is a non-voting member, and that perhaps the committee would like to review his status. Following a discussion, the RRC concurred that in the future Bob would be a voting member of this committee.

13. Construction Expenditures

Dave Galt informed the RRC that within the next four months he needed to have a study completed for use in the upcoming legislative session. Dave would like a consultant to look at a block of construction expenditures to determine how much money comes back to the government in the form of income tax, corporate tax, and things like that.

Following a discussion, the RRC told Dave they had no issues with Dave moving forward with this project.

Next meeting: August 27, 2002

cc: Craig Abernathy/Research Bureau

Debbie Alke/Aeronautics Division

Kent M. Barnes, P.E./Materials Bureau

Bruce H. Barrett/District Administrator-Billings

Linda Francis/Business Plan Administrator

Loran Frazier, P.E./District Administrator-Missoula

Jason Giard, P.E./District Administrator-Butte

John Horton/Right-of-Way Bureau

Michael P. Johnson/District Administrator-Great Falls

Joseph P. Kolman, P.E./Bridge Bureau

William L. McChesney/District Administrator-Glendive

Russell G. McDonald/Human Resources Division

Robert D. Morgan, P.E./Traffic & Safety Bureau

Kenneth H. Neumiller/Engineering Oversight Bureau

Jeanne Nydegger/Research Bureau

Brooke Page/Research Bureau

Carl S. Peil, P.E./Preconstruction Bureau

Timothy W. Reardon/Legal Services

Stan Sternberg, Acting Manager/Environmental Services

James A. Walther, P.E./Highway and Engineering Division

Mark A. Wissinger, P.E./Construction Bureau

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